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ABSTRACT

This review analyzes change and trends in the following areas: (1) population, (2) education, (3) psychology, (4) the family, (5) work, (6) construction, (7) security, and (8) values. The overview indicates complex changes will affect the career outlook for the 1980's and beyond. There are ample opportunities for counselors to participate in the social change during this time of new realities. (Author/HD)

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CAREERS FOR TODAY AND TOMORROW

* S. Norman Feingold

PREFACE

Before discussing careers for today and tomorrow, it seems appropriate to take a brief but penetrating look at the world about us. By the time it takes to say this sentence, planet earth will travel 200 miles in its orbit around our sun, the sun 3000 miles in rotation of our galaxy, and about 350,000 miles more space will open up between our galaxy and those of the Hydra Cluster, as the universe continues to expand.

Further complex changes are apparent everywhere if we take time to examine them. All of these changes have affected and will affect the career outlook for the 1980's and beyond. Let us remember that facts are highly perishable items and have little resistance to time and change. We are living in a time of accelerated change, visible violence, terrorism and uncertainty in a distance-shrunken world. Technology has advanced more rapidly in the last 50 years than in the last 5000 years.

PHYSICAL CHANGES

Let us briefly look at some of the physical changes. The United States' population today is about 217 million. By the end of 1985, it will probably be over 234 million people.

1. For centuries the speed of man was limited and, in fact, outdistanced by many members of the animal kingdom. Today, astronauts travel at approximately 18,000 miles an hour, 300 miles a minute, 5 miles a second. Man-made machines can travel up to 100,000 miles per hour. Some physical scientists tell me this is just the beginning of far greater speeds.

2. We can measure time in billionths of a second, have machines that can perform two million computations a second, and have

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a missile program where infinite exact timing all along the line must and is taken for granted.

3. The wing span of today's modern jet is 20 feet longer than the entire plane originally flown from Kitty Hawk. Explorer I made in 1958 is as outmoded as the Model T Ford.

4. Thirty years ago we were relatively a rural community. Today a megalopolis extends from Boston to Washington - 40 million + people in 500 miles.

EDUCATIONAL CHANGES

In 1900, one out of 60 was a college graduate; today, it is one out of eight. Educational expenditures for 1976-77 were $131 billion. More than 9 million people are in college today. Knowledgeable people say that today 30% of our gross national product is for education. The national education industry consists of the production, business and consumption of education.

Through the mid-1980's we can expect the following:

1. Educational expenditures will be more than $161 billion. Continuing education throughout life will be more prevalent. More and more universities will probably increase their extension and correspondence courses. The demand for new innovative schools will be great. More workers will return to school to refurbish their skills. New experimental colleges will open with many students in readiness to attend. The number of youth in secondary school will decrease from 20 million to 17 million students.

2. Major changes and break-throughs in the roles of colleges in the late 70's and '80's will include: Training for more paraprofessional careers, continued involvement in community activities, and more experimental non-traditional colleges and new modes for learning.

PSYCHOLOGICAL CHANGES

The behavioral sciences today are making tremendous strides in understanding, predicting and controlling human behavior. The studies of Asch and Crutchfield reveal that if most people see circle A as larger than B, other people will also see circle A as larger than B. Or, consider the research of Smith, Spence and Kline. An emotionless face is placed on the screen. If the word "anger" is rapidly flashed, people see the face as angry. If the word "happy" is flashed at a rapid rate, they see the face as happy. More and more innovative programs related to personality and new uses of drugs and therapy promise new and different treatments. Some major break-throughs may be possible.

FAMILY AND HUMAN VALUES

The nuclear family is undergoing many changes. Families are more mobile, more competitive and achieving. The family's primary function is changing. About 45% of all married women are now working. The new projections for women in the 1980's reveal that an earlier age, the three roles of wife, mother and career will come into clearer focus for many. By age 32, most mothers see their youngest child in school. About 40% of the approximately 97 million workers now in our labor force are females.

Values are in transition. Perhaps this is the hidden agenda today for many counseling and career sessions. We live in a time when far too many people

have tossed away old values, but have not been able to incorporate new ones to substitute in their place. One out of 10 youths becomes an arrested delinquent. Too many people seek immortality but don't know what to do on a rainy Sunday afternoon. Values and work are now, for the first time, being critically examined and issues faced realistically.

FUTURE TRENDS

1. Let us look at the 1980's as far as physical changes are concerned. Our space travel will be tremendously extended by the late 1980's. We have landed man on the Moon some years ago. An instrument landing on Mars has taken place. Other planet touchdowns are probable in the near future. Many of the world's airports are now being enlarged, particularly in resort areas, to take care of new planes.

2. People are living longer. There is a higher percentage of the aging. More than 10% of the U.S. population is now over 65.

3. All kinds of new spare banks, including more than 70 eye banks, exist. Many scientists predict the use of electronically operated artificial hearts.

4. Music in concert halls and in juke boxes may be composed by computers. (Some of the records favored by teenagers sound that way already to an older generation.)

5. Paper furniture and clothing will probably be prevalent. Synthetic textile fabrics will probably be the rule. People may place their fur coats in washing machines. The use of synthetics, mass production and improved machinery will take their toll among agricultural workers.

6. By the 1980's, programs from all over the world will be readily available to people on TV and perhaps even on their wrist TV sets. There are now permanent communications satellites.

7. The impact of automation is documented and discussed with great controversy as to its immediate but not long-range effects. Some factories have as their chief check planner a sophisticated computer. On the other hand, more jobs are being created yearly that require more training and more specialized technical skill.

8. These new types of careers are reflected in our language, as in new scientific terms such as neutrino astronomy, space mechanics, radio astronomy, job developer, selenology, plasma physics, coronary care unit technician, inter-galactic media. New acronyms and slang sprinkle even the layman's conversation.

9. Three-fourths of the drugs used today were not known 15 years ago. Far reaching innovations in the drug industry will continue in the late 1970's and 1980's.

10. In the late 1980's, three-fourths of our factories will probably be turning out products not yet invented.

11. A large number of people will be spending a greater portion of their time as parts of big organizations.

CHANGES IN THE WORLD OF WORK

Ours is a changing work force. We are experiencing a major technological revolution. In 1985, more than 22 million U.S. workers will be under 25. Over 20 million U.S. wives work. Over half of all college-educated women work after marriage. Mobility and adaptation are becoming characteristic of the American way of life. The population is in a constant state of flux. More than 6 million people change their homes from one state to another in one year. Many are changing their jobs. Many not only are changing locations, they are changing careers as well. There may well be for most people in high school today five or six different jobs in their lifetime.

Technology in the United States has led to a higher standard of living. There is more leisure time for most people and many new and improved consumer goods. There has been an accelerated creative use of human beings, as first stated by Norbert Weiner. There has been increased creative leisure time for certain segments of our population. There are more things to do, both recreationally and hobbywise, but less space in which to do them. More people have to wait to enjoy the recreation facilities that are available. People wait at the golf course, at camps, and so forth. A smaller percentage of the population have gardens, garages, and so forth, as we move into apartment dwellings.

Technology has created many important and new manpower problems. Technological change in certain communities has hurt individuals, employers and even the communities themselves. Jobs that have long served as entrance jobs for many young people, or those with minimum skill and education, have not increased as fast as the labor force. The problem has been further compounded by rising educational and training requirements for a growing number of occupations. There also has been a tremendous reduction in demand for farm workers. This has caused families to move from rural areas to cities. Nine out of ten students now living on a farm will probably not be able to earn a living a decade hence. They will have to move to the city to earn a living.

It is no longer enough for a person entering the labor force to be able and willing to work. The premium today is on education and training. On the other hand, a college degree is no longer a guarantee to a job or career. Part-time and full-time jobs and volunteer experience, cooperative education in high school and college, job-seeking skills and value clarification workshops are all of major import in a tight labor market. The use of volunteer adult BBCCS career advisors, successful in their work, who supplement and complement the counselor's activities, have proved most helpful in selective job placement.

The person today who is unable to read, the untrained high school dropout, and the worker with out-of-date skills is unable to compete as successfully as he could in former years in the labor market. There is no question that the most precious resource is human resources. A new commitment has stirred people, and particularly counselors, to develop and creatively use the nation's total manpower resources. All citizens can then be members of the great society. For high schools, post-secondary schools interested in selective placement, I highly recommend Placement Services: A Training Manual, by Dr. Bertis Capehart, Prakken Publications, Ann Arbor, Michigan.

As a nation, we have learned to accept technological change and try to adjust to it. With respect to manpower, there have been two occupational shifts in this country. The first was a shift from farm to non-farm employment which began about 1880 in the North and West. After the year 1900, the pace of this shift accelerated. Agricultural employment declined both in actual numbers and

proportion of the labor force. Between 1900 and 1960, the proportion of the nation's workers in agriculture declined from almost four out of every ten workers to fewer than one out of ten. It still continues to decline to less than 4% in 1976 and probably less than 3% by the year 1985.

The second major occupational shift was the changing relationship between white collar and blue collar employment which gained momentum around the turn of the century. In 1956, for the first time, white collar employment was more in actual numbers than blue collar. The trend in employment of service workers is also worthy of note. Between 1900 and 1960, the relative position of service workers as a group increased slightly. However, this relative stability masked a sharp decline in private household workers and a sharp increase in other service workers such as hair dressers, policemen, practical nurses, and the like.

A significant change in demand for labor took place about 1950. For the first time in history, the numbers of workers in service industries, which include trade, transportation, public utilities, finance, insurance, real estate, government and other services, surpassed the number in the production or goods-producing industries. This category includes manufacturing, agriculture, construction and mining. The proportion of all workers in goods-producing industries declined from 51% in 1947 to 46% ten years later, and has continued to fall to about 32% in 1976. Slightly less than a third of the labor force now works in goods-producing industries. This trend is expected to continue through 1985, although at a pace slower than that of the last three decades. The United States is the only country in the world in which the jobs in service industries outnumber the jobs in goods industries.

THE FUTURE

Let's take a look at occupations and career futures. Never has there been an age when so many changes can well be predicted. Preparations can then be made for these changes. There will be differences in the rate of employment growth among industries.

Let us now take a look at today's labor force of approximately 97 million. In 1985, it will be approximately 108 million. More women are working today. The male percentage of the job force is shrinking -- 67% in 1961, 61% in 1967, 60% in 1976. Through the mid-1980's, over 5 million job openings will be offered annually. This represents those jobs that result from growth as well as the replacement of jobs of workers who leave the labor force. For the next decade, we can expect annual openings for 206 blacksmiths, in spite of all our automobiles. We can expect 13,000 openings annually for telephone operators, in spite of all the automation in the telephone industry. We will need 300,000 secretaries and stenographers each year. We will need 300,000 salespersons annually; 90,000 truck drivers annually; etc.

1. Today, approximately 13.4 million semi-skilled or operative workers make up the second largest occupational category in the labor force. By 1985, we may expect 15.6 million workers. These are assembly-line workers; bus, truck and cab drivers; and most machine operators. The employment outlook for these workers through the mid-1980's is generally below average in spite of the fact that growth and replacement needs will provide jobs for many workers between 1976 and 1985. Driving occupations enjoy an average outlook through the mid-1980's.

2. Clerical workers comprise the largest segment of American workers. Almost eight out of ten of the 15.6 million clerical workers are women. The

largest number are secretaries. The need for workers in all clerical occupations will continue through the mid-1980's. We may expect 20.0 million workers by 1985. This again reflects the give and take of automation. This rapid growth in services corresponds to our rapidly growing need for repairs, advertising and services. These are services that a higher standard of living of a growing population calls for.

3. In 1976, 11.3 million skilled workers made up the fifth largest segment of employed persons. This group includes carpenters, tool and die makers, electricians, typesetters, etc. Employment outlook for this group is mixed. About two-thirds of the expected growth will be accounted for by construction workers and mechanics. These are the two largest occupations within this group. The rest of the growth mainly will be accounted for by metalcraft workers and blue-collar supervisors. Certain craft occupations in the railroad industry, such as locomotive engineers and railroad repairers, will decline due to the overall decline of the railroad industry. Very little growth is anticipated in the printing crafts because of advances in printing technology. There will be almost 14 million skilled workers by 1985.

4. Professional and technical workers, as an occupational group, have an employment outlook above average through the mid-1980's. In 1976, approximately 13.3 million workers comprised this highly trained segment of the labor force. Seven out of ten of these workers are engaged in teaching, providing health services, or in doing scientific and technical work. In 1985, the need for professional and technical workers will be almost twenty percent over that it is today with about 15.8 million employed. Demand for additional manpower is already in evidence across the board in professional and technical fields. The demand for professional and technical workers, and the shortage of highly trained workers, has ramifications for other rungs of the occupational ladder. Greater emphasis is now being placed upon development of workers with less than professional training. This relatively new and still largely undefined segment of the work force will continue to grow and solidify through and beyond the 1980's. Opportunities for these technicians, particularly in the health and helping professions, will continue to rise if present trends continue.

5. The outlook for agricultural workers, except scientific and research personnel, will continue to decline. In 1976, there were 2.8 million agricultural workers. By 1985, it will be about 1.9 million.

6. Managers, proprietors and kindred workers are expected to show a slightly above-average growth. Nevertheless, decrease in the self-employed segment of the labor force is expected. The outlook through the mid-1980's is much better for salaried workers, i.e. executives and managers, than for proprietors. In 1976, there were 9.3 million workers in this category. In 1985, there will be about 11.3 million managers, proprietors and kindred workers.

7. Through the mid-1980's, employment outlook for workers in sales occupations, especially real estate, stock brokers, insurance, etc., will continue to rise at a rate faster than population increase. In 1976, 5.5 million workers were in sales. By 1985, there will probably be 6.4 million.

8. The predicted outlook for unskilled workers is considerably below the average increase, i.e. less than 12% increase for laborers compared to an average increase of 19% for all workers between 1976 and 1985. This occupational category absorbs a large percentage of non-white workers. In 1976, there were approximately 4.3 million unskilled workers. It is predicted that by 1985 there will be 4.8 million.

9. Numbering 10.1 million in 1974, service workers (excluding private households) are projected to increase to 13.7 million in 1985. This is a faster rate of increase than that anticipated in any other occupational group. Their share of the total is expected to rise from 11.8 percent to 13.2 percent. Employment growth in this heterogenous occupational group, which includes such diverse jobs as police officer, cook, hairdresser, and janitor, will stem mainly from growth in population, business activity, and personal income. The demand for service workers is less affected by technological change than many other occupations; hence their employment growth is not restrained very much by productivity advances.

10. In contrast to the rapid employment gain anticipated for other service workers, the number of private household workers is projected to decline from about 1.2 million in 1974 to approximately 900,000 in 1985. A continued decline in these service workers is expected despite a rise in the demand for them. As personal incomes rise and more women work outside the home, demand for maids and other household workers should increase. However, fewer persons are expected to seek household jobs because of the poor earnings and low social status associated with these jobs.

OTHER TRENDS

In summarizing briefly the changing labor market, we can see that we will pass further from agricultural to non-agricultural employment. Farm employment will continue to decline. The second most rapid growth for the country is in services. This is caused by our rapidly growing need for repairs, advertising and many other services for the highest standard of living that a growing population can call for. Government employment has become one of the fastest growing industries today, in 1977. We may expect moderately rapid increases in this area. Most of the growth is expected in state and local governments resulting from the increased need for public health, education, sanitation, welfare and similar services.

Construction is also expected to increase rapidly in the next ten years. This growth reflects a rapid rise in the number of households, schools, hospitals, roads, and urban renewal projects necessitated by the great aspirations of our industrial economy. A fairly rapid rise in finance, insurance and real estate is expected despite the effect of automation on clerical appointment in both banking and insurance.

The rise of employment in trade will result from a rapidly growing population, a higher standard of living, and a greater number of people employed part time, especially women in super-markets, grocery stores, etc., in the suburbs. Manufacturing is expected to grow somewhat. Most of the increase will be in durable goods. In transportation and public utilities, there will be divergent trends. Air transportation and motor freight are expected to rise. Railroad employment will continue to decline.

At the present time about 20% of all jobs are filled by college graduates. As counselors, we must be ever cognizant not to put undue emphasis on a college education at the expense of other equally important courses of study. We must also be cognizant that non-professional courses receive the dignity, honor and prestige that they merit. Service crafts and technical occupations should gain more status than they now receive. Some occupations have shortages because of lack of status. We could probably remedy the shortage of high quality chefs in this country, if, as in France, we held national cooking competitions. There, chefs receive all sorts of accolades, including the coveted Legion of Honor.

Access to national trends is no panacea for local or regional manpower projects. In spite of the importance of keeping national trends in mind, training is a local affair. It must be carried out with the specific labor market in mind. A constantly revised and reasonable detailed national framework may help regional forecasters make better manpower projects than they otherwise could.

CAREERS TODAY AND TOMORROW

Many of the new jobs of tomorrow will probably be specialties of jobs and careers that exist today. For example: Ocean farming or mining probably will grow in the numbers of people employed. At the same time, new specialties will evolve particularly at the technician level. The same will probably be true of the automobile industry. Already there is evidence that hydrogen can be used to power automobiles. This will mean probably a new kind of automobile mechanic as well as additional safety measures which will require specialized technicians.

Here's another area. More and more people are camping out and using a wide variety of government facilities for recreation. We have already reached the point of no return. Thousands of people cannot find a place to stay or must wait hours in order to participate in recreation facilities. This will probably lead to the Government obtaining additional lands for recreational purposes. This, in turn, will require staff who will fill the positions needed for the recreation of the growing population.

The health fields will continue to grow as we attempt to better meet the health needs of this country. Twenty years ago no one probably would have known what a mini-scan technician or an EEG or CAT technician would do.

Many new technician jobs will open up in the health fields. New discoveries will be made. It may be in the area of organ transplants or in new discoveries for our aging population. It may be in new devices that make it possible for the severely handicapped to earn a living and new lifestyles.

Food processing and fast food service will probably grow. This will include more efforts for sophisticated electric ovens and other practical methods that are already changing the eating habits of a large proportion of our population.

Finally, although not great in numbers, there will be the glamour jobs opening up as we move on to the high frontier in space. In addition to astronauts, space mechanics, colonists and scientists, there will be all sorts of new technical jobs. They will be required as man builds space colonies. All sorts of specialized technicians are necessary in order for man to continue his endless journey.

Here is a listing of new jobs and possible new careers, or extensions of present ones, in the decades ahead. You may be able to list many more realistic possibilities:

Angio Technologist; Astronaut; Biomedical Engineer; Biomedical X-ray Repairperson; Calibration Technician; Cardiovascular Pharmacologist; CAT Scanner; Cellular Immunologist; Child Development Associate; Child Mental Health Specialist; Clinical Pharmacist; Cognitive Neurophysiologist; Coordinator of Government Services; Counselor Specializing in Second Careers; Cytogeneticist; Demonstrator of Business Equipment; Ecologist; Electron Difractionist; Emergency Medical Technician; Environmental Management Professional; Ethicist; Family Therapist; Futurist; Genetic Associate; Genetic Counselor; Geneticist; Geriatric Nurse; Glassblower; Health Administrator; Health Scientist Administrator; Home Health Aide; Human Services

Worker; Internal Auditor; Inventor; Job Developer; Leisure Counselor; Licensed Psychiatric Technician; Management and Public Policy Professional; Marine Geologist; Medical Laboratory Technician; Mental Health Nurse; Microsurgeon; Molecular Biologist; Neurobiologist; Neuro Pharmacologist; Neutrino Astronomist; Nursing Home Counselor; Ocean Farmer; Oceanographer; Ombudsman; Paraprofessional -- Case Work, Law, Dentistry, Medicine, Teaching, Veterinary Medicine; Physical Oceanographer; Plant Biologist; Plant Farmer; Plant Physiologist; Plant Therapist; Policy Scientist; Psychobiological Clinician; Public Affairs Psychologist; Public Professional; Radio Astronomist; Reclamation Technologist; Recreation Aide; Recreation Therapist -- Mentally Ill, Mentally Retarded, Prison; Research Volunteer; Retirement Counselor; Review Coordinator; Reviewer of Scientific Research Articles; Road Sign Maker; Robot Engineer; Scientific Researcher; Scientific Reviewer; Selenologist; Sociobiologist; Space Colonist; Social Director; Space Mechanic; Thanatologist; and Transplant Coordinator.

THE QUALITY OF WORK LIFE

Whatever new jobs and careers that are available in the decades ahead, four principles for the Humanization of Work appear to be a viable goal that can be attained.

Security

Security at the worksite implies that each employee's need to be free from anxiety, fear and worry concerning one's health and safety, and income, as well as future employment. If physical conditions are dangerous, such as air pollution, then insecurity and economic want induce fear and anger. Work is not then humanized.

What can we say is a fair measure of security? Since enactment of the Fair Labor Standards Act in 1938 providing a minimum hourly wage, a great deal of favorable progress has taken place. Acceptable standards of living have noticeably increased. Changes in consumer credit structure have made an annual income rather than an hourly wage a measure of security. Many employers are better able to insure each worker's needs. The family as a social institution no longer adequately provides against economic hardship. An employee in fear of losing his or her income lacks security necessary to develop potential and skills. Long-range future security is also necessary. Besides Social Security, one needs protection of retirement benefits. Benefits should not be lost if persons want to change their job or career.

Equity

Equity implies that employees are compensated commensurately with their contribution to value of services or product. Lack of equity (e.g. significant differences in net income between supervisors and workers) often causes anger and deep hostility. Equity requires active exploring new methods of evaluating individual contributions considered just by all those involved. Equity leads to increased responsibility and sensitive concern for fairness in work.

Equity also encompasses the idea of profit sharing. Employees can be assured a specified percentage of profits divided among work groups. This concept takes into account contributions of each group toward increased productivity. While this is exceedingly difficult to assess, once the principle is accepted many companies have developed equitable profit sharing.

Another nuance of equity is paying an employee not for a particular task but on skills and knowledge developed with respect to other jobs on the worksite. It means paying for what an employee knows and can do rather than for a specific job. Work is humanized. Work is then structured around democratic teams rather than rigid authoritarian groupings.

Individuation, Craftsmanship, Autonomy and Learning

Work can stimulate development of unique potential, abilities, interests, values, craftsmanship, and continued capacity for life-long learning. Individuation can lead to a non-bureaucratic work environment. Employees are stimulated to develop themselves as people and learn as much as they wish over their worklife. Individuation also involves bringing back the concept and significant value of craftsmanship. Employees have maximum autonomy in determining their work roles and in planning how it may be done.

Recent studies of employees' attitudes have clearly revealed that jobs and careers can be more interesting, allow more freedom, and stimulate employees to develop potential interpersonal abilities. Employees have an inherent sense of what is crucial to their mental health.

Democracy

Degrees of democracy at the worksite range from participatory management, where employees' views are patiently heard and actively considered in decision making, to systems of worker control. An organizational structure is created in which employees' authority and responsibility are institutionalized. It is opposed to making the employee into a passive homogenized object and part of a large machine. Employees can manage themselves in creative ways. Authoritarian, hierarchical control can be replaced by democratic cooperative, efficient, self-managed groups.

Democracy at work also includes the right to free speech within the worksite. Activeness and responsibility from all participants is mutually required. Democracy in the worksite means that employees also take responsibility and accountability for what is produced, how money is invested, and for the social consequences of their production.

CHANGING TIMES

The needs of society are constantly changing. Predictions are tenuous because of the many changing variables that we have to cope with in this new dynamic world of ours.

People today can make a contribution to themselves, their family and society if we provide them with widening education and new career opportunities. We are rapidly becoming a thrill-seeking, hedonistic culture where anything goes. The more shocking, the better news copy. Do your own thing, a worthwhile concept has been perverted.

I remain an optimist by conviction and temperament. Counselors are, or can be, in the center of the stage of the helping professions. The counselor's role is more critical than ever in an economy where unemployment is high and many thousands of qualified workers are underemployed.

The time is now. The privileges and responsibilities were never greater. Too often we ask questions with an almost childlike belief that somehow answers

will make life simpler for us. Too often, it is just the other way around. Answers make life more complex. Good answers seldom settle issues. They merely raise new ones. They lead the way to additional facts, further possibilities and new questions. The more fundamental the question, the more likely it is that we have to consider new thoughts and face new realities.

TENTATIVE CONCLUSION

In concluding, let me quote Aldous Huxley's childlike but penetrating question: "What are people for?" Manpower predictions are designed to tap the pulse and direction of an exciting dynamic world. In making these predictions we are saying to our youth and adults: "This is where you may be needed. People today can make a contribution to themselves, their families and society. This is where things will be happening. You can have a piece of the action." We have tried to offer a glimpse of the future. But, ultimately the future belongs to those who have the courage to grab a fistful of tomorrow and shape it. If we, as parents and counselors, instill this courage in our children, we will have left them a priceless legacy.

In conclusion, let me tell you a little story. It's about a beautiful blond coed at a well-known, prestigious, eastern university who dreams one evening that Burt Reynolds took her wining and dining at an exclusive country club. She had a glorious time. Then he took her home. As they stood on her front porch, he looked down into her blue eyes and she looked back at him. They were very close together and she said, "What next?" And he answered, "It's up to you; it's your dream." I think that those of you who are interested in people have a dream and it's up to you.

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SELECTED BIBLIOGRAPHY

Abeles, Loismay. "The Educational Field Agent: Definition and Analysis of a New Professional Role." 1975. Education Department, University of Massachusetts.

Abroms, Gene M. and Norman S. Greenfield. "A New Mental Health Profession." Psychiatry: Journal for the Study of Interpersonal Processes. 1973. Vol. 36, No. 1, pp. 10-22.

Berman, Gerald S. and Marie R. Haug. "New Careers: Bridges or Ladders?" Social Work. 1973. Vol. 18, No. 4, pp. 48-58.

Brayfield, Arthur H. "How to Create a New Profession: Issues and Answers." American Psychologist. 1976. Vol. 31, No. 2, pp. 200-205.

Cherniss, Cary and Ed Engatios and Sally Wacker. "Job Stress and Career Development in New Public Professionals." Professional Psychology. 1976. Vol. 7, No. 4, pp. 428-436.

Cowperthwaite, Gordon H. "Management -- The New Profession For the 70's." Cost and Management. 1972. Vol. 46, No. 3, pp. 11-17.

Crawshaw, Ralph, MD. "Review Coordinator: A New Job or a New Profession?" The Journal of the American Medical Association. 1976. Vol. 235, No. 25, pp. 2721-2722.

Dollase, Richard Henry. "The New Woman Leader: A Case Study in Leadership Adaptation in a Professional Organization." 1976. School of Education, Boston University. University Microfilms International: P.O. Box 1764, Ann Arbor, Michigan, 48106. pp. 247.

Estrin, Thelma. "Ms. Biomedical Engineer: A New Professional Opportunity for Women." IEEE Transactions on Education. 1975. Vol. E-18, No. 1, pp. 11-14.

Favela, Frank and Zoltan Fuzessery. "The New Professional Emerges." Personnel and Guidance Journal. 1974. Vol. 53, No. 4, pp. 319-323.

Frisoli, Arturo. "A Study of Selected Factors Operating in the Selection of a Career in a New Field." 1968. Department of Education, American University. Dissertation Abstracts International, Vol 29/08-A, pp. 2519-20. 113 pp.

Garfield, Eugene, PhD. "Proposal For a New Profession: Scientific Reviewer." Current Contents No. 14, 1977. Philadelphia: Institute for Scientific Information.

Gartner, Alan, Vivian Carter Jackson and Frank Riessman, Eds. Paraprofessionals Today, Vol I: Education. New York: Human Science Press, 1977. 248 pp.

Kessler, Jean G. "The Focus is on Engineering as College Recruiting Finishes Most Active Year of Seventies." Reprint from CPC News Release, August 1977. Bethlehem, Pa. College Placement Council, Inc.

Laws, Judith Long. "The Psychology of Tokenism: An Analysis." Sex Roles. 1975. Vol. 1, No. 1, pp. 51-67.

Laws, Judith Long. "Work Aspirations of Women: False Leads and New Starts." Journal of Women in Culture and Society. 1976. Vol. 1, No. 3, Part 2. pp. 33-49.

Marks, Joan H. MS. and Melissa L. Richter, PhD. "The Genetic Associate: A New Health Professional." American Journal of Public Health. 1975. Vol. 66, No. 4, pp. 388-390.

Miller, Juliet V. and Libby Benjamin. "New Career Development Strategies: Methods and Resources." Personnel and Guidance Journal. 1975. Vol. 53, No. 9, pp. 694-699.

Osterbind, Carter C. New Careers for Older People. 1971. Gainesville: University of Florida Press. pp. 110.

Ressler, Ralph. Career Education: The New Frontier. 1973. Worthington, Ohio: Charles A. Jones Publishing Company. 147 pp.

Rieger, Norbert I. and Alcon G. Devries. "The Child Mental Health Specialist: A New Profession." American Journal of Orthopsychiatry. 1974. Vol. 44, No. 1, pp. 150-158.

Rieger, Norbert I. and Alcon G. Devries. "The Need for Some Specific Suggestions for a Standardized Training Program for a New Professional: The Child Mental Health Specialist." Child Care Quarterly. 1974. Vol 3, No. 3, pp. 177-187.

Roberts, Pearl R. ACSW. "The Etiology of a New Careers Program in Public Health." American Journal of Public Health and the Nations Health. 1973. Vol. 36, No. 7, pp. 635-638.

Shattuck, Gerald M. and John M. Martin. "New Professional Work Roles and Their Integration into a Social Agency Structure." Social Work. 1969. Vol. 14, No. 3, pp. 13-20.

Smith, Richard T. "Health and Rehabilitation Manpower Strategy: New Careers and the Role of the Indigenous Paraprofessional." Social Science and Medicine. 1973. Vol. 7, pp. 281-290.

Soltis, Lawrence A. "New Degree Program Organizes Professional Development." Chemical Engineering. 1976. pp. 171-173.

Weg, Dr. Ruth B. "Concepts in Education and Training for Gerontology: New Career Patterns." The Gerontologist. 1973. Vol. 13, No. 4, pp. 449-452.

Weil, Dr. Mildred W. "The Career--Homemaker Role: New Orientation for Analysis." Journal of Home Economics. 1962. Vol. 54, No. 4, pp. 294-296.

SELECTED MAGAZINES

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